TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

5th Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500004

O.P.(SR) No.10 of 2020

Dated 02.06.2021

Present
Sri T. Sriranga Rao, Chairman
Sri M. D. Manohar Raju, Member (Technical)
Sri Bandaru Krishnaiah, Member (Finance)

Between:

Southern Power Distribution Company of Telangana Limited,
6-1-50, Mint Compound, Hyderabad-500063 … Petitioner

AND

-Nil- … Respondent

The petition came up for hearing on 15.02.2021. Sri Mohammad Bande Ali, Law Attaché for the petitioner has appeared through video conference and having been heard and stood over for consideration to this day, the Commission passed the following:

ORDER

Southern Power Distribution Company of Telangana Limited (TSSPDCL) (Petitioner) has filed a petition u/s 181 read with sections 86 (1) (e), 66 and 94 (2) of the Electricity Act, 2003 (the Act, 2003), seeking amendment to certain clauses of Interim Balancing and Settlement Code being Regulation No. 2 of 2006 and its subsequent amendments thereof as adopted by the Commission in Regulation No. 1 of 2014. The contentions of the petitioner are as under.

a) The Appendix–3 of Interim Balancing and Settlement Code being Regulation No.2 of 2006 and its later amendments for Open access Transactions [IBSC] as adopted by the Commission vide Regulation No. 1 of 2014, which read as follows.

Appendix-3

"Terms & Conditions for Banking facility allowed to Wind, Solar and Mini-Hydel Power Generation:

1. Banking charges shall be adjusted in kind @ 2% of the energy delivered at the point of drawl.
3. The banking year shall be from April to March i.e., from the 1st day of April of a year to the 31st March of the subsequent year.
4. Banked units cannot be consumed/redeemed in the peak months (i.e., from 1st April to 30th June and 1st February to the 31st March of the banking year under consideration) and also in the peak hours as ordered by the Commission in the Retail Supply Tariff Order of the relevant year.
5. The provisions on banking pertaining to drawl restrictions shall be reviewed based on the power supply position of the state.
6. For captive generator, the energy injected into the grid from date of synchronization shall be considered as deemed banked energy.
7. For third party sale, the energy injected into the grid from the date of synchronization till the date prior to captive consumption to open access approval date will be considered as deemed banked energy.
8. The unutilized banked energy shall be considered as deemed purchase by DISCOM(s) at the average pooled power purchase cost as determined by Commission for the relevant year.
9. Where a solar or wind generator is having a power purchase agreement (PPA) (for sale) with the licensee, the energy injected into the grid from the date of synchronization to Commercial Operation Date (COD) will be purchased by the DISCOMS at 50% of the first year tariff of the project, as per the provisions of the PPA."

b) Due to the increasing solar power injection into the grid that is for large scale promotion of solar power projects helped in aggressive capacity additions and thereby driving the cumulative installed capacity of solar power in the in the state. This proposal was particularly made as the

current trend of falling solar prices, which is very less than Rs.3/- per unit at present compared to the average pooled power purchase cost, which is Rs. 4.28 / kWh for the FY 2019-20.

c) Many other ERCs of Tamil Nadu, Odisha, Haryana, Uttar Pradesh, Andhra Pradesh, Gujarat, Rajasthan, Tripura, Maharashtra etc. have made comprehensive methodologies to streamline the hindrances prevailing in facilitation of banking facility for the growing renewable power injection into the grid. Hence, it is necessary to revisit the clauses and come out with a new comprehensive way forward to overcome the drastic enhancement of the solar injection into the grid reducing the variability in renewable power generation thus achieving better grid stability and at the same time for the promotion of solar power to meet the demand for power in an environmentally sustainable manner.

d) The following details are furnished for perusal of the Commission praying the need for the amendments to the existing regulation.

<table>
<tr><th>Sl. No.</th><th>Third Amendment Regulation (1 of 2017)</th><th>Proposals for Amendments to Regulation (1 of 2017)</th><th>Justification for proposal</th></tr>
<tr><td colspan="4">To facilitate accounting of energy for banking by generating companies (having captive consumers), who have no open access agreement with the licensees and having connection agreement only, a separate agreement to be known as “Banking Agreement”, which shall contain all relevant clauses of banking of energy including terms and conditions under APPENDIX–3, has to be entered into by the distribution and retail supply licensees with such generating companies.</td></tr>
<tr><td colspan="4">Appendix–3 Terms & Conditions for Banking facility allowed to wind, solar and mini-hydel power generation</td></tr>
<tr><td>1</td><td>The banking year shall be from April to March i.e., from the 1st day of April of a year to the 31st March of the subsequent year.</td><td>No change.</td><td></td></tr>
<tr><td>2</td><td>Banking charges shall be adjusted in kind @ 2% of the energy delivered at the point of drawl.</td><td>Banking charges shall be adjusted in kind at the rate of 5% of the energy delivered at the point of drawl.
<table><tr><th>State</th><th>Banking Charges</th></tr><tr><td>Andhra Pradesh</td><td>5%</td></tr></table></td><td>The energy which is banked into the grid at solar generic tariff when the scheduled consumer does not utilize the solar generated energy and which will impact the DISCOM schedule</td></tr>
</table>

Sl. No.	Third Amendment Regulation (1 of 2017)	Proposals for Amendments to Regulation (1 of 2017)	Justification for proposal
		<table><tr><td>Haryana</td><td>5%</td></tr><tr><td>Orissa</td><td>2.5%</td></tr><tr><td>Tamil Nadu</td><td>5%</td></tr><tr><td>Uttar Pradesh</td><td>6%</td></tr></table>	and thereby, to maintain the grid stability, the long term or short term generators with whom DISCOM are paying the fixed charges even though the capacity is backed down and later the same banked energy which is to be purchased at a higher cost than the solar generic tariff and is again settled to their scheduled consumer at their applicable tariff (which is much higher than the solar generic tariff). Hence, the DISCOM, in revenue scenario incurs losses financially and technically. Therefore, if the banking charges are increased the loss component can be compensated a little.
3	Banked units cannot be consumed redeemed in the peak months (that is from 1st April to 30th June and 1st February to the 31st March of the banking year under consideration) and also in the peak hours as ordered by the Commission in the retail supply tariff order of the relevant year.	In addition to the clause, the volume of banked energy has to be restricted to specific amounts: Hence, the banking facility (for reutilization) is to be extended only to captive generators as their generating plant is established only for use of electricity for their captive consumers only and the quantum of banked energy for any particular month is also to be capped to 10% of that particular month generation only and any	The developers are gaming by retaining the banked energy into the grid as the same is being settled at APPC cost by DISCOM. Further as the solar generic tariff is reducing day by day compared to APPC which is increasing the developers instead of settling the energy to the consumers (which is supposed to be earned at generic tariff) are banking the excess energy completely into the

Sl. No.	Third Amendment Regulation (1 of 2017)	Proposals for Amendments to Regulation (1 of 2017)	Justification for proposal
		excess energy beyond that shall be free of cost. Whereas, for third party generators any excess generation after the energy settlement as per the Regulation 2 of 2006, shall be considered as purchase of power by DISCOM which is again to be restricted to 10% of that particular month generation only and excess energy shall be free of cost.	grid (which is supposed to be earned at APPC). Instead of sale of banked energy to the consumer, it is more beneficial to sale such banked energy to DISCOM. Further, the injection of banked energy which is infirm and variable and drawl of banked energy which is being apportioned is affecting the load curve of DISCOM and destabilizing the grid. Thereby, the volume of banked energy into the grid is increasing enormously and loading the DISCOM financially and technically which needs to be restricted.
4		New clause to be added: Generators have to communicate time block wise banked energy withdrawal schedule and allocations to respective at least ten (10) days before the commencement of billing cycle.	Scheduling of banked energy enables DISCOMs to carry out proper scheduling and accurate accounting of energy.
5	For captive generator, the energy injected into the grid from date of synchronization shall be considered as deemed banked energy. For third party sale, the energy injected into the grid	To be deleted. (Or) To exclude the deemed banked energy concept both for captive and third party users. As the solar generation in the state of Telangana has also increased and is in	Most of solar power plants are just synchronizing their power plants and injecting energy into the grid and without any sale to their scheduled consumers (captive or third party)

Sl. No.	Third Amendment Regulation (1 of 2017)	Proposals for Amendments to Regulation (1 of 2017)	Justification for proposal
	from the date of synchronization till the date prior to captive consumption to open access approval date will be considered as deemed banked energy`	surplus position. If it has to be continued, then such deemed banking of energy shall be allowed only to captive usage only and that too only for the period from date of synchronization to the date of open access application upto a maximum period of one month.	and such energy is to be considered as deemed banked energy as per the provision of Regulation No.1 of 2017 and DISCOM has to purchase such energy at the applicable tariff which is indirectly construed to be sale to DISCOM at APPC cost. As the cost of solar PPAs has got down, most of the developers are under the benefit of this deemed banked energy and are claiming for purchase of the same by DISCOM. As it has a huge impact on the DISCOM and is wrongly misused by the solar power developers which hindering the DISCOM power procurement planning and procedure laid by the MoP.
6	The provisions on banking pertaining to drawl restrictions shall be reviewed based on the power supply position of the state.	No change.	
7	The unutilized banked energy shall be considered as deemed purchase by DISCOM(s) at the average pooled power purchase cost as determined by	The unutilized banked energy shall be considered as deemed purchase by DISCOM(s) at the 50% of average pooled power purchase cost or 50% of latest feed in	Regulation No.1 of 2017 is mainly intended for facilitation of banking facility to the inhouse captive generators who do not possess any open access agreement.

Sl. No.	Third Amendment Regulation (1 of 2017)	Proposals for Amendments to Regulation (1 of 2017)	Justification for proposal
	TSERC for the relevant year. Where a solar or wind generator is having a power purchase agreement (PPA) (for sale) with the licensee, the energy injected into the grid from the date of synchronization to Commercial Operation Date (COD) will be purchased by the DISCOMs at 50% of the first year tariff of the project, as per the provisions of the PPA.	tariff for RE sources as determined by Commission for the relevant year and the quantum of unutilized banked energy shall be restricted to 10% of the total banked energy for that relevant banking year. Where a solar or wind generator is having a PPA for sale with the licensee, the energy injected into the grid from the date of synchronization to Commercial Operation Date (COD) will be purchased by the DISCOMs as per the provisions of the PPA.	Whereas, the clause pertaining to deemed purchase by DISCOM is made applicable to generators who possess open access agreement also. Hence, the same needs to be relooked into. The solar average price has dropped to below the average power purchase cost from conventional energy sources. Therefore, the solar energy which is getting injected at low price is getting banked and being purchased by DISCOM at a higher rate of APPPC cost. Therefore, this provision of purchase of unutilized banked energy at 100% APPPC cost has burdened the DISCOM financially without recovering its revenue realization properly and such unwanted or unscheduled energy is being paid by DISCOM at a higher tariff only to benefit the solar power developers, whereas, the same loss incurred to DISCOM is again passed on to the consumers of DISCOM.

f) The details of proposed amendments are as under:

I) **1st Proposal - Banking Charges**:

i) The existing clause (1) in Annexure-3 of IBSC

"1. Banking charges shall be adjusted in kind @ 2% of the energy delivered at the point of drawl."

ii) The generation from solar/renewable sources is not constant during a period of 24 hours of a day. It could be possible that it generates electricity when scheduled user does not require it. In such a case energy generator banks it with distribution licensee who supplies this energy to its consumers at applicable tariff. Here the licensee, for returning the banked energy which is being procured at higher tariff from other conventional sources is required to collect such banking charges. Thus, banking rate electrical energy should be nominal. Moreover, the scientific method for determination of banking charges is constructed to be the difference between the marginal cost of power purchase of concerned DISCOM and the applicable generic tariff by the Tamil Nadu Electricity Board in its Tariff Regulation, 2008 and the same was also accepted by the Appellant Tribunal of Electricity in Appeal No.197 of 2012.

iii) Banking facility was initially facilitated to the renewable energy sources as a promotional measure and based on the todays solar market statistics, it is clear that the solar energy tariff or generic tariff is reduced day by day and the APPC cost of the concerned DISCOM is raising linearly, which clearly depicts that the banking charges to be increased as per the scientific method of calculating the banking charges.

iv) The energy banked into the grid at solar generic tariff when the scheduled consumer does not utilize the solar generated energy and which will impact the DISCOM schedule and thereby, to maintain the grid stability, the long term or short term generators with whom DISCOM has PPAs are backed down, however, DISCOM are paying the fixed charges even though the capacity is backed down and later the same banked energy which is to be purchased at a higher cost than the solar generic tariff and is

again settled to their scheduled consumer at their applicable tariff which is much higher than the solar generic tariff. Hence, the DISCOM, in revenue scenario incurs losses in two ways that is firstly solar is injected into the grid at solar power tariff if the excess energy is to be settled back to the generator in the same month, the applicable tariff would have been the solar tariff and the same is again returned from banked energy by DISCOM purchasing the same amount of energy at a cost higher than solar tariff, as the DISCOM need to purchase the energy from the conventional energy sources at a cost and the second is the banked energy is adjusted to the scheduled consumer who is a high end consumer at an applicable tariff, so the DISCOM has to settle the input energy which was supposed to be purchased at solar generic tariff is getting settled at applicable tariff which is double the solar tariff.

iv) The following is summary of banking charges being collected by the other state utilities from the renewable power developers, who avail the banking facility.

- **Tamil Nadu**: Banking allowed subject to 5% banking charges in a financial year.
- **Odisha**: Banking charges are collected at 2.5% of energy dispatched.
- **Haryana**: Recent Notification dated 24.07.2018, Banking Charges are collected at 5% of power banked (in kind)
- **Andhra Pradesh**: (Andhra Pradesh Solar Power Policy, 2018 dated 03.01.2019), Banking charges shall be adjusted in kind @ 5% of the energy delivered at the point of drawl.
- **Uttar Pradesh**: Recent draft regulation notification dated 04.04.2019, Banking Charges are proposed at 6% of power banked (in kind).

vi) Banking charges shall be adjusted in kind at the rate of 5% of the energy delivered at the point of drawl instead of 2% as the number of renewable energy generators are increasing day-by-day and

there are huge number of RE generators who have already synchronized their power plants to the grid and are approaching DISCOM for availing banking facility from the date of synchronization and this may lead to increase in the amount of banked energy which is actually an unscheduled and inadvertent power and such banked energy shall be drawn by the captive / third party consumers as per their requirement which will impact the scheduling of the DISCOM. Such inadvertent quantum of power which is to be drawn by the captive/third party consumers is to be allocated from the actual scheduled power of the DISCOM which is purchased by the DISCOM at a higher unit price. Wherein, the captive/third party consumers are availing benefit of low unit price.

vii) Further the same request was already made to the Commission vide letter dated 22.07.2017, requesting to approve the banking charges shall be adjusted in kind at the rate 5% instead of 2% of the energy delivered at the point of drawl.

viii) The banking charges need to be increased from 2% to 5% of the energy delivered at the point of drawl.

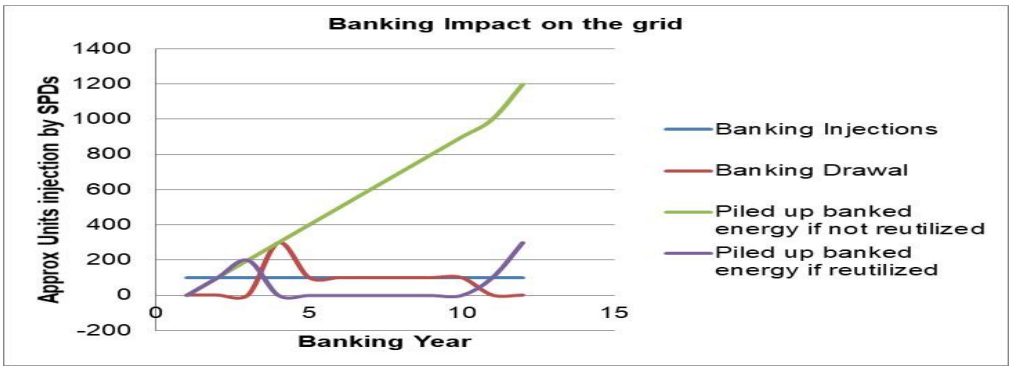
II) **2nd Proposal - Banking injection and drawl**:

i) ***Existing clause (4) in Annexure-3 of IBSC***

"4. Banked units cannot be consumed/redeemed in the peak months (that is from 1st April to 30th June and 1st February to the 31st March of the banking year under consideration) and also in the peak hours as ordered by the Commission in the Retail Supply Tariff Order of the relevant year.

ii) Firstly, with respect to settlement of energy in case of solar, wind and mini-hydel open access (OA) generators the actual generation during the month shall be deemed as scheduled energy. For the purpose of settlement in respect of scheduled/OA consumers availing supply from these OA generators, the actual generation during the month will be apportioned for each time block of the month and deviations reckoned accordingly.

Therefore, even though the energy is not generated uniformly, the developer is already facilitated with a huge benefit by means of this apportioning of the energy.



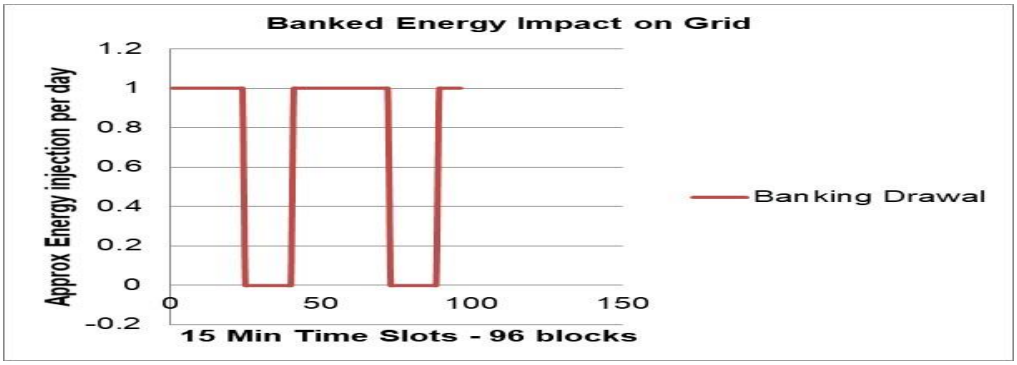
iii) The above graph clearly depicts that the energy injections (for banking) can be done throughout the banking year whereas, the drawl from banked energy based on the peak months' restriction shall have the impact on the load curve of the DISCOM as shown in red graph. In this regard, it also to be noticed that if the banked energy is not reutilized completely or not scheduled to their consumers by the developer, then the complete banked energy remaining in the grid shall be as shown green graph. In this context, it is to be noticed that the developer shall have a power purchase agreement (PPA) with their consumers at some specific predefined tariff, if such banked energy is reutilized back by the consumer then developer shall earn such energy at that specific tariff, but if it is remained in the grid, then such energy shall be purchased by the DISCOM at APPC which is increasing year-on-year and instead of sale of banked energy to the consumer, it is more beneficial to sale such banked energy to DISCOM. Thereby, the volume of banked energy into the grid is increasing enormously and loading the DISCOM financially just for the sake of promotion of renewable sources of generation.

iv) Therefore, in order to curtail such gaming by the developers, the banking facility has to be constrained. The provision on banking pertaining to drawl restrictions shall be reviewed based on the power supply position of the state.

v) The solar power injection being non-firm and invariable is just getting injected into the grid during the sunny time and such time includes the peak and off-peak period, due to which the impact on the grid is destabilising the load curve of the DISCOM and the solar injections are creasing on a large scale.

vi) During the peak period in order to meet the demand of TSSPDCL, the long term power procurement is tied up for meeting the standard demand, due to injection of solar power during such a time, the high end consumers are shifting to this solar energy at a lower rates and the power procured by DISCOM at higher rates (during the peak periods) is being supplied to the low end consumers at a cheaper rate and finally DISCOM is incurring the huge loss and burden is completely being imposed for this fluctuation. Whereas, during this sunny time, that is the non-peak time, though the demand of DISCOM is low, the excess solar injection at sunny times is injected and such energy is being utilized by the low end consumers which is at lower rates and such excess energy is again to be settled to the generator at higher rate (APPC).

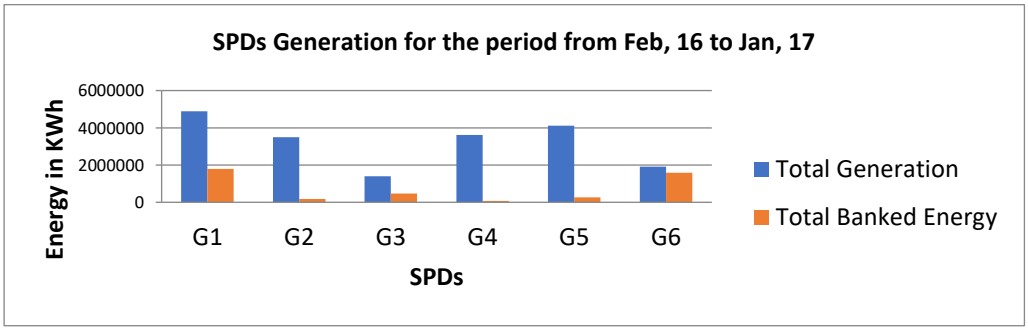
vii) The following graph represents the variation of banking drawl from the grid as per the terms and conditions of the regulation. In actual scenario, the energy shall be banked in time slot wise based on the actual generation and consumption, but the same banked energy is apportioned and facilitated to the scheduled consumer consumption at a uniform quantum for the available drawl periods, the impact of such benefited adjustment also has a huge impact on the grid stability and one such is shown as below considering uniform adjustment.



viii) It can be noticed that the solar power developers actually have to utilise their generated power completely to their captive / scheduled consumers and the energy shall be banked if there are any under drawl as such by the consumer, but merely 30 % of energy generated is banked into the grid approximately. For clear statistical analysis the following is furnished for perusal. The below statistics are given with the actual data few solar power developers who are connected to the TS grid and carrying out generation utilization under captive usage.

Generator	Total generation (kWh)	Total banked energy (kWh)	% of banked energy on total generation
G1	4889719	1785935	**36.52**
G2	3496786	182910	**5.23**
G3	1402631	466314	**33.25**
G4	3616999	77104	**2.13**
G5	4115611	269460	**6.55**
G6	1910271	1579347	**82.68**

Graph 1: SPDs generation details and complete utilization pattern of the SPD



ix) From the above table, it can be observed that the banked energy from the total generation for each SPD is nearly about 30% of the

total generation, the developer need to reschedule and utilize the banked energy to their captive/scheduled consumers to the maximum extent, but the same is not being adopted by the developers and maximum energy is being remained in the grid as banked energy, which shall be settled at APPC at the end of the banking year.

x) The sample scenario that is being followed in various States for detailed understanding.

a) Gujarat ERC in its order No.3 of 2015 in the matter of determination of tariff for procurement of power by Distribution Licensees and others from solar projects in the state of Gujarat ruled as under:

"***4.7 Banking***

… …

All solar power projects that are commissioned under captive generating mode and not operating under the REC route or third party sale shall be eligible for banking of energy for one month period only. The banking period is determined with consideration of billing cycle for recipient units of the concerned Distribution Licensee, who receive the solar energy for captive use. Banking shall be considered on first in first out (FIFO) energy basis. … …"

b) Rajasthan ERC in its (Terms and Conditions for Determination of Tariff for Renewable Energy Sources – Wind and Solar Energy) Regulations, 2014 stipulated as under:

"***39. Banking***

(1) Energy shall be allowed to be banked at consumption end for only captive consumption within the State.

(3) Energy Accounting:

(a) RE Power Generator/Developer shall intimate to SLDC and to the concerned Distribution Licensee on first day of every month, out of

available energy for that particular month, the quantum of energy it wishes to bank for captive consumption within the State:

Provided that where no such intimation is received on or before first day of the month, the intimation last received would become applicable for the month.

(b) The banked energy in a month shall not exceed the quantum of energy injected in the grid in the month. In case the energy injected in the month is lower than indicated banked energy, the banked energy would be deemed to get restricted upto the energy injected.

(c) The RE Power Generator/Developer would be entitled to get payment @ 60% of energy charges applicable for large industrial power tariff, excluding fuel surcharge, if any, in respect of 10% of unutilized banked energy after the end of month of banking. Unutilized banked energy, in excess of 10% shall lapse."

c) Tripura ERC in its Renewable Energy Regulations (Multi Year Tariff) Regulations, 2015 stipulated as under:

"*33(1) … … However, no banking facility shall be provided for supply (third party sale) from renewable energy sources through open access. … …"*

xi) The banking facility which has been extended to all categories of renewable source of generators (captive and third party) has facilitated large scale energy transactions under open access and is burdening the grid. Hence, the banking facility (for reutilisation) is to be extended only to captive generators as their generating plant is established for use of electricity for their captive consumers only. Further the quantum of banked energy for any particular month is also to be capped to 10% of that particular

month generation and any excess energy beyond that shall be free of cost. Whereas, for third party generators any excess generation after settlement shall be considered as purchase of power by DISCOM which is again to be restricted to 10% of that particular month generation and excess energy shall be free of cost.

xii) The scheduling of banked energy, the developer has to communicate the schedule in advance which was earlier existing in the Regulation No.2 of 2014 for proper accounting of banking energy.

> *"Generators have to communicate time block wise banked energy withdrawal schedule and allocations to respective at least ten (10) days before the commencement of billing cycle."*

III) **3rd Proposal: Deemed banking facility:**

i) ***Existing clauses (6&7) in Anneuxre-3 of IBSC:***

"6. For captive generator, the energy injected into the grid from date of synchronization shall be considered as deemed banked energy.

7. For third party sale, the energy injected into the grid from the date of synchronization till the date prior to captive consumption to open access approval date will be considered as deemed banked energy."

ii) The clause does not clear the period of consideration of deemed banked energy concept in case of third-party sale, as it also includes the concept of date prior to captive consumption to open access approval. The interpretation of injection of energy from the date of synchronisation to the date of open access approval date or to the date prior to captive consumption is not clear and causing confusion which needs to be clarified by the Commission.

iii) For solar power developers, generated energy which was under drawn by the scheduled consumer was earlier considered to be inadvertent energy supplied by the generator to the DISCOM(s)

and shall not be paid for by the DISCOM as per clause 10.3 of the Regulation No. 2 of 2006. Banking of energy was facilitated only to wind and mini-hydel projects.

iv) The same banking facility was extended to solar developers vide Regulation No. 2 of 2014 after the formation of Telangana that is at the time of emerging phase of renewable source of generation also, the concept of deemed banked energy was not introduced as a promotional measure of renewable source.

v) Even the Solar Policy, 2012, which was effective in the year 2014, has not facilitated the provision of deemed banking of energy.

vi) After the issuance of Telangana Solar Power Policy, 2015, the concept of deemed banked energy was introduced to the solar power developers as a promotional measure. The relevant extract of the policy is as under:

> *"For captive / third party sale, energy injected into the grid from date of synchronization to open access approval date will be considered as deemed energy banked"*

vii) However, as there were no specific directions to adopt the policy, the same was not implemented by DISCOM.

viii) Therefore, during the promotional time to encourage solar generation, the said benefit was framed to be extended, but in this present scenario, as the state has become rich in solar power generation, huge number of solar power developers are coming forward and establishing their power plants and injecting the solar based generation into the grid and under merits of this deemed banked energy, most of solar developers are just synchronising their power plants and injecting energy into the grid and without any sale to their scheduled consumers (captive or third party) or neither searching for consumers for utilizing their solar generated energy just injecting the solar generated energy into the grid and such energy is to be considered as deemed banked energy as per the provision of regulation No.1 of 2017 and DISCOM has to purchase such energy at the applicable tariff which is indirectly construed to be sale to DISCOM at APPC cost. As the cost of

solar PPAs has got down, most of the developers are under the benefit of this deemed banked energy and are claiming for purchase of the same by DISCOM.

ix) On the other hand, regarding the sale of power to TSSPDCL, the Ministry of Power (MoP) vide letter dated 03.10.2018 notified the revised guidelines for procurement of power by distribution licensees under short-term and medium-term compulsorily through DEEP E-Bidding portal which clearly instructed that all the DISCOMs shall procure power through competitive bidding process through DEEP E-bidding portal for meeting the short and medium term requirements of DISCOM. Hence, for sale of power to TSSPDCL, these solar power developers are directly getting benefit under this provision and without any PPA or competitive bidding process that is through DEEP E-bidding portal only, selling power to DISCOM at high prices.

x) Such sale has no wheeling or transmission charges or losses to be borne by the developer but just the banking charges which is very less.

xi) In view of the above, it is proposed to exclude the deemed banked energy concept both for captive and third party users as it has a huge impact on the DISCOM and is wrongly misused by the solar power developers which hindering the DISCOM power procurement planning and procedure laid by the MoP. Moreover, the solar generation in the state of Telangana has also increased and surplus.

xii) If it has to be continued, then such deemed banking of energy shall be allowed only to captive usage from the date of synchronization to the date of open access application upto a maximum period of one month.

xiii) The concept of deemed banked energy is absent in many renewable rich States.

IV **4th Proposal**: **Unutilized banked energy deemed purchase by DISCOM**

i) ***Existing clauses (8&9) in Annexure-3 of IBSC:***

"8. The unutilized banked energy shall be considered as deemed purchase by DISCOM(s) at the average pooled power purchase cost as determined by Commission for the relevant year.

9. Where a solar or wind generator is having a power purchase agreement (PPA) (for sale) with the licensee, the energy injected into the grid from the date of synchronization to commercial operation date (COD) will be purchased by the DISCOMs at 50% of the first year tariff of the project, as per the provisions of the PPA."

ii) Before the issuance of Regulation No.2 of 2014 was issued, the concept of purchase of banked energy by DISCOM was not there and the banked energy remaining unutilised as on 31st December was treated as lapsed one as per the terms and conditions for banking facility allowed to wind and mini-hydel power generators of the Regulation No. 2 of 2006.

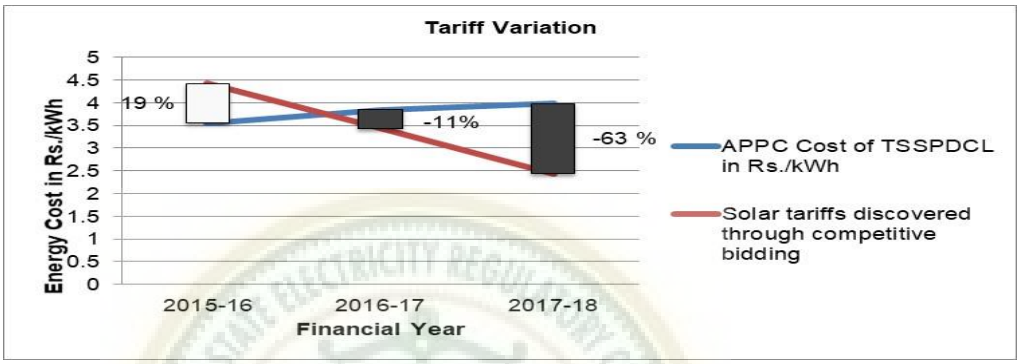
iii) The same was amended vide the Regulation No. 2 of 2014, wherein, the unutilized energy was mandated to be purchased by DISCOM at 50 % of APPC, the relevant clause is also extracted below.

> *"The purchase price payable by the DISCOMs for unutilized banked energy will be equivalent to 50% of the pooled cost of power purchase, applicable for that financial year, as determined by the Commission under RPPO / REC Regulation (1 of 2012). DISCOMs shall settle such purchase transactions with the generators by 31st March of each year."*

iv) During the FY 2014-15. average pooled purchase cost was Rs. 3.38 / kWh and the unutilised banked energy was purchased at 50% of APPC that is Rs.1.69/kWh at which time the solar generic tariff was much higher than 50% of APPC and the solar energy

generation was utilised to the maximum extent by their scheduled consumers.

v) Now, the unutilized banked energy is to be purchased by DISCOM at 100% of APPC cost (that is FY 2017-18 Rs. 3.979 / kWh) whereas, the solar generic tariff is much lower than the APPC cost and the developers are taking the benefit of this and are banking the energy to the maximum extent instead of reutilizing the energy.



vi) The above graph clearly depicts the drastic variation of increase in APPC and the drop in solar generic tariff for year to year. During FY 2015-16, when the solar tariff was higher than APPC (19% variation), the unutilised banked energy was settled at 50 % of APPC (Rs. 1.775 / kWh) and during FY 2016-17 also the solar generic tariff was lower than APPC but, the variation was around 11%; even during such period also the unutilised banked energy was settled at 50% of APPC (Rs. 1.92 / kWh). But, for FY 2017-18, the APPC had drastically increased compared to solar generic tariff that is variation around -63% and during such a period, settlement of unutilised banked energy at 100% APPC at Rs. 3.979 / kWh has facilitated a huge profit to the developers to bank the energy rather than reutilising the same to their scheduled consumers who shall pay at the rate of Rs.2.44 / kWh.

vii) The solar average price has dropped below the average power purchase cost from conventional sources. Therefore, the solar energy getting injected at low price is getting banked and being purchased by DISCOM at a higher rate of APPC cost.

viii) This provision of purchase of unutilised banked energy at 100% APPC has burdened the DISCOM financially without recovering its revenue realization properly and such unwanted or unscheduled energy is being paid by DISCOM at a higher tariff only to benefit the solar power developers, whereas, the same loss incurred to DISCOM is again passed on to the consumers of DISCOM.

ix) For clear understanding the relevant clauses as approved by various State ERCs are extracted below.

a) Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources - Wind and Solar Energy) Regulations, 2014 stipulated as under:

"39. **Banking**

(3) (c) The RE Power Generator/Developer would be entitled to get payment @ 60% of energy charges applicable for large industrial power tariff, excluding fuel surcharge, if any, in respect of 10% of unutilized banked energy after the end of month of banking. Unutilized banked energy, in excess of 10% shall lapse."

b) Andhra Pradesh State Solar Power Policy, 2018 dated 03.01.2019 Clause 4 (b) stipulates as under:

"4.(b) … … *The unutilized banked energy shall be considered as deemed purchase by Discoms at 50% of the Average Pooled Power Purchase Cost as determined by the APERC for the applicable year. Energy settlement shall be done on monthly basis.*

The payment for the deemed purchase of un-utilized banked energy shall be capped to 10% of the total banked energy during the applicable year."

Further, APERC vide recent Regulation No.4 of 2019 issued 4th Amendment to (Interim Balancing & Settlement Code for Open Access transactions Regulation No.2 of 2006) published on 11.03.2019, has amended the Principal Regulation No.2 of 2006

by deleting the concept of purchase of unutilised banked energy at 100% of APPC and restricted to 50% of pooled power purchase cost as per the request of APTRANSCO.

c) Maharashtra Electricity Regulatory Commission (Distribution Open Access) Regulations, 2016.

"20.6 The unutilized banked energy at the end of the financial year, limited to 10% of the actual total generation by such Renewable Energy generator in such financial year, shall be considered as deemed purchase by the Distribution Licensee at its Pooled Cost of Power Purchase for that year:"

2) The petitioner has sought the following amendment to the regulation.

"The unutilized banked energy shall be considered as deemed purchase by DISCOM(s) at the 50% of average pooled power purchase cost as determined by the Commission for the relevant year and the quantum of unutilized banked energy shall be restricted to 10% of the total banked energy for that relevant banking year"

3) The petition has been taken up for hearing at SR stage as regards maintainability of the same. The Commission has heard the representative of the petitioner and perused the material on record. The submissions in nutshell are as below:

"… … The representative of the petitioner stated that the petition is filed for amending the Regulation No. 2 of 2006 as adopted by the Commission with regard to certain aspects. The Commission sought to know from the representative of the petitioner as to whether the petition is required to be considered through public hearing mode. The representative of the petitioner replied in the affirmative as to the process to be undertaken by the Commission on the issue. … …"

Commission's view

4) The Commission has examined thoroughly the submissions of the petitioner. The petitioner has sought amendments to certain clauses of Interim Balancing and Settlement Code Regulation, 2006 being Regulation No.2 of 2006 as adopted by the

Commission in its Regulation No.1 of 2014 and as amended by the Commission vide Regulation No.1 of 2017.

5) The Commission noticed that the petitioner did not state or explain the maintainability aspect with respect to who can file a petition when a regulation is made by an authority exercising the power to make regulations. As regards complying with the provision contained in the Act, 2003, it is noticed that the Commission has already exercised the power by giving an opportunity to all the stakeholders before it has framed the regulation. It is clear and obvious that the regulation is made in exercise of such power duly complying with the procedure set out therein.

6) It is appropriate to state that an authority while making a rule or regulation is required to afford an opportunity to all the stakeholders in the matter including but not limited to persons and bodies who are required to follow/implement such rules or regulations unless such an exercise is specifically required to be followed as provided in the law itself. At the same breath, any addition or amendment or variation of regulation cannot be at the instance one of the stakeholders, be it the persons who are implementing or the beneficiaries of such implementations. The exercise of framing rule or regulation which is termed as subordinate or delegated legislation, cannot be added to or amended or varied by invoking power either through the adjudicatory proceedings or inherent rule making power at the instance of any of the stakeholders. On the other hand, such an authority can suo-moto exercise such a power to add to or amend or vary the same as explained in section 21 of General Clauses Act, 1897 and that too in accordance with the policy framework that is to be adopted by the authority at any given point of time in accordance with the governing Act and Rules made thereunder.

7) The provisions referred by the petitioner in so far as sections 66, 86 (1) (e) and 94 (2) of the Act, 2003 are neither relevant to the subject matter nor are of any guidance to the Commission with regard to addition or amendment or variation of subject regulation, as they relate to powers and function of the Commission and furtherance of the objects of the Act, 2003. Since the Commission has already exercised the regulation making power, it cannot lay its hands on the regulation unless it is exercising its inherent power and not otherwise.

8) Moreover, the Government of India in exercise of its rule making power has also notified the Electricity (Procedure for Previous Publication) Rules, 2005. By this petition the Commission could not have followed the said Rules. It is well settled law that regulations are termed as subordinate legislation. Regulations having been notified in exercise of legislative power conferred under the Act, 2003, become part of the statute and partake the character of legislation. Clause 17 of the Regulation No.2 of 2006 empowers the Commission that it may from time to time add, vary, alter, suspend, modify, amend or repeal any provisions of the regulation. In doing so, the Commission is bound to follow the due procedure and such amendments cannot be carried out qua an order in this petition. Accordingly, the Commission does not find it appropriate to decide on the merits of the amendments sought by the TSSPDCL in this Order. The Commission would treat the submissions of the TSSPDCL as suggestion/input, as and when the Commission initiates the process of adding to or amending or varying regulation relating to the banking facility for solar, wind and mini-hydel sources. The TSSPDCL is also at liberty to place any more inputs when the Commission invites comments/suggestions on any such draft regulation on the subject matter.

9) The petition stands refused to be entertained subject to the observation made above, without costs.

This order is corrected and signed on this the 2nd day of June, 2021.

Sd/-	**Sd/-**	**Sd/-**
(BANDARU KRISHNAIAH)	(M. D. MANOHAR RAJU)	(T. SRIRANGA RAO)
MEMBER	MEMBER	CHAIRMAN

//CERTIFIED COPY//